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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,256

02/09/2007

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P18611-US1

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7590

09/01/2009

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EXAMINER

ELHAG, MAGDI

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

09/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,256	Applicant(s) GERSTENBERGER ET AL.	
	Examiner MAGDI ELHAG	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-4, 6 and 8 is/are rejected.
- 7) ☒ Claim(s) 5 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/31/2006 and 03/16/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the applications' communication filed on 02/29/2007.

In virtue of this communication, claims 1-8 are currently pending in this office action.

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 03/31/2006 and 03/16/2009 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Drawings

2. The drawings were received on 03/31/2006. These drawings are reviewed and accepted by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kall (**US Patent No. 6957063 B1**) in view of Tiedemann, Jr. et al. (**US Patent No. 6839336 B2**, herein after Tiedemann) and further in view of Kim et al. (**US 20040053619 A1**, hereinafter Kim).

4. Claim 1, Kall teaches a method for using and implementing a service-on-demand in a mobile communication system (Abstract, FIGS 2-3 and Col6 line 7 to Col8 line 64); wherein the method comprises:

Kall further teaches “receiving MBMS participation requests from the user equipments on a predetermined MBMS-uplink channel” (FIG. 3 and page 7 lines 23-26 where Kall teaches the mobile station transmits the necessary information for identifying the subscriber and the information on the selected service **in a registration message over a signaling channel**);

Kall further teaches “registering the user equipments for an MBMS session based on the received participation requests from said user equipments” (FIG. 3 and page 7 lines 35-40 where Kall teaches the on-demand-service centre **registers** that the subscriber starts using the service and **transmits an acknowledgement of the registration**);

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Kall further teaches "providing charging information in response to receiving the acknowledgment message" (Page 7 lines 35-40 where Kall teaches the on-demand-service centre registers that the subscriber starts using the service and transmits an acknowledgement of the registration, **the maximum time y for the use and a decryption key of the service-on-demand encryption** to the base transceiver station in a message which relays the message to the mobile station), therefore providing the key is based on prepaid charges which is reflected in the calculated maximum use time;

Kall further teaches "transmitting one or more decoding keys to the user equipment for decoding one or more MBMS-messages after having charged the user equipment for previously received MBMS-messages" (FIG. 3 and page 7 lines 35-39 where Kall teaches the on-demand-service centre registers that the subscriber starts using the service **and transmits an acknowledgement of the registration, the maximum time y for the use and a decryption key of the service-on-demand encryption** to the base transceiver station in a message 3-4), therefore providing the keys after prepay as explained in page 7 lines 7-55.

Kall does not explicitly teach "receiving on the predetermined MBMS-uplink channel, an acknowledgment message from user equipment indicating that one or more MBMS-messages has been received".

However, in a related field, Tiedemann, Jr. et al. teaches a method for acknowledging broadcast transmission wherein a **Reverse Acknowledgement Channel (R_ACHCH)** is designed for acknowledging the success or failure of a

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transmission on a dedicated channel and on a broadcast channel (abstract, Col 9 lines 38-48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Kall by including reverse acknowledgement channel as taught by Tiedemann, so that it will be possible to know which users may have received the broadcast and who may have missed it (Col2 lines 40-54).

Kall in view of Tiedemann is silent in teaching the reverse signaling channel is a “predetermined MBMS-uplink channel”. However in the same field of endeavor, Kim teaches a mobile communication system which supports **a multimedia interactive data transmission** service by assigning a dedicated channel, wherein a broadcast/multicast-type shared (or common) channel is used for forward transmission and **a dedicated channel is used for reverse transmission so that each user's data and request can be transmitted** (Page 2 Para 0030).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to modify Kall in view of Tiedemann by using a dedicated channel used for reverse transmission, as taught by Kim, so as to support a multimedia interactive data transmission service (Page 2 Para 0030).

5. Considering claim 2 as applied to claim 1 above, Kall as modified as a whole teaches “wherein the user equipment is already charged in response to said participation request” (Kall: Page 7 lines 23-31 the on-demand-service centre checks the subscriber information from the home location register and detects that the

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subscriber has agreed to prepay for the service used, register the user and sends the key...).

6. Considering claim3 as applied to claim 1, Kall as modified as whole teaches “wherein the charging information also considers the lapsed time during which the user equipment has participated in said MBMS-session” (Kall: Page 6 lines 52-63 teaches when the user terminates the service, **the on-demand services calculates the elapsed time and creates a toll ticket in order to charge the user**).

7. Considering Claim 4 as applied to claim 1 above, Kall as modified as whole teaches “wherein the charging information also considers the user subscription profile” (Kall: Page 7 lines 23-31 teaches the on-demand-service centre **checks the subscriber information from the home location register and detects that the subscriber has agreed to prepay for the service used**, register the user and sends the key...).

8. Considering Claim 6, Kall teaches a method for using and implementing a service-on-demand in a mobile communication system (Abstract, FIGS 2-3 and Col6 line 7 to Col8 line 64); wherein the method comprises:

Kall further teaches “transmitting on a predetermined MBMS-uplink channel, a participation request in order to participate in an MBMS session (FIG. 3 and page 7 lines 23-26 where Kall teaches the mobile station transmits the necessary information

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for identifying the subscriber and the information on the selected service **in a registration message over a signaling channel**);

Kall further teaches "receiving MBMS-messages from the telecommunication system" (Col7 lines 43-46 where Kall teaches the mobile station receives the acknowledgement, **separates the key** and the maximum time y from the acknowledgement and **moves to receive the on-demand-service channel included in the message**);

Kall further teaches "decoding one or more of the received MBMS-messages utilizing a stored decoding key that is provided by the telecommunication system" (Col7 lines 43-49 t where Kall teaches the mobile station receives and decrypts the service transmitted encrypted using the key which was received in the acknowledgement message).

Kall does not explicitly teach "if required by the network operator, transmitting on said predetermined MBMS-uplink channel, acknowledgement messages for one or more received MBMS-messages". However in a related field, Tiedemann teaches a method for acknowledging broadcast transmission, wherein a Reverse Acknowledgement Channel (R_ACHCH) is designed for acknowledging the success or failure of a transmission on a dedicated channel and on a broadcast channel (abstract and Col9 lines 38-48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Kall in view of Tiedemann by including a reverse acknowledgement channel as taught by Tiedemann, so that it will be possible to

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know which users may have received the broadcast and who may have missed it (Col2 lines 40-54).

Kall in view of Tiedemann is silent in teaching the reverse signaling channel is a "predetermined MBMS-uplink channel". However in the same field of endeavor, Kim teaches a mobile communication system which supports a multimedia interactive data transmission service by assigning a dedicated channel, wherein a broadcast/multicast-type shared (or common) channel is used for forward transmission and a dedicated channel is used for reverse transmission so that each user's data and request can be transmitted (Page 2 Para 0030).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to modify Kall in view of Tiedemann by using a dedicated channel used for reverse transmission, as taught by Kim, so as to support a multimedia interactive data transmission service (Page 2 Para 0030).

10. Considering claim 8, Kall teaches a mobile station utilized in the on demand services system (FIG. 4 and Col 8 line 65 to Col 10 line15), said user equipment comprising:

Kall further teaches "means for storing decoding keys received from the telecommunication system" (Col 9 lines 49-56 where Kall teaches the controller can separate from the acknowledgement associated with the registration **the transmission decryption key** and use the key to decrypt the service-on-demand transmitted

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encrypted), therefore means for storing the decoding keys since the decoding key is first separated and then used to decrypt the service -on-demand when received;

Kall further teaches “means for storing MBMS-messages received from the telecommunication system” (FIG. 5 and Col10 lines 38-40 where Kall teaches the service areas of each service-on-demand transmitted from the on-demand-service centre can also be stored in the memory M), therefore it would be possible to store the MBMS as well if needed;

Kall further teaches “means for processing and decoding the received MBMS-messages utilizing a stored decoding key” (Col 9 lines 49-56 where Kall teaches the controller can separate from the acknowledgement associated with the registration the transmission decryption key and **use the key to decrypt the service-on-demand transmitted encrypted**), therefore means for processing and decoding the MBMS messages.

Kall does not explicitly teach “means for transmitting acknowledgement messages on a predetermined MBMS uplink channel for one or more received MBMS-messages”.

However in a related field, Tiedemann teaches a method for acknowledging broadcast transmission, wherein a Reverse Acknowledgement Channel (R_ACHCH) is designed for acknowledging the success or failure of a transmission on a dedicated channel and on a broadcast channel (abstract and Col9 lines 38-48). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Kall in view of Tiedemann by including a reverse acknowledgement channel as

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taught by Tiedemann, so that it will be possible to know which users may have received the broadcast and who may have missed it (Col2 lines 40-53).

Kall in view of Tiedemann is silent in teaching the reverse signaling channel is a **“predetermined MBMS-uplink channel”**. However in the same field of endeavor, Kim teaches a mobile communication system which supports a multimedia interactive data transmission service by assigning a dedicated channel, wherein a broadcast/multicast-type shared (or common) channel is used for forward transmission and a dedicated channel is used for reverse transmission so that each user's data and request can be transmitted (Page 2 Para 0030).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to modify Kall in view of Tiedemann by using a dedicated channel used for reverse transmission, as taught by Kim, so as to support a multimedia interactive data transmission service (Page 2 Para 0030).

Allowable Subject Matter

11. Claims 5 and 7 are objected to as being dependent upon rejected base claims but would be allowable if rewritten in independent form including all of the limitations of the corresponding base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: Considering Claim 5 as applied to claim 1 above, prior art teaches the source can retransmit portions of data in case a negative acknowledgement (NAK) is

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received, or positive acknowledgement (ACK) is not received for that portion. However, prior art does not teach the keeping track of the sequence number of the acknowledgment messages for each user of a group of users participating in MBMS session, retransmitting a decoding key when an acknowledgement is missing and specifically ignore to provide the charging information when receiving an acknowledgement message comprising an already received sequence number.

14. The following is a statement of reasons for the indication of allowable subject matter: Considering claim 7 as applied to claim 6 above, prior art fails to teach the steps recited in the claim which will enable the user equipment to handle the messages that can not be decoded.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAGDI ELHAG whose telephone number is (571)270-3187. The examiner can normally be reached on Monday-Thursday 9:00 to 6:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang can be reached on 571-2727667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Magdi Elhag
Examiner
Art Unit 2617

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